

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vignia 22313-1450 www.uspto.gov

|                             | *                     |            |                      |                         |                  |
|-----------------------------|-----------------------|------------|----------------------|-------------------------|------------------|
| APPLICATION NO.             | N NO. FILING DATE     |            | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
| 09/646,599                  | 09/646,599 01/10/2001 |            | John G. Goddard      | 4147-10-PUS             | 1790             |
| 22442                       | 7590                  | 07/21/2003 |                      |                         |                  |
| SHERIDAN                    | N ROSS PC             |            | EXAMINER             |                         |                  |
| 1560 BROADWAY<br>SUITE 1200 |                       |            |                      | LUKTON, DAVID           |                  |
| DENVER, C                   | O 80202               |            |                      | ART UNIT                | PAPER NUMBER     |
|                             |                       |            |                      | 1653                    | 11               |
|                             |                       |            |                      | DATE MAILED: 07/21/2003 | 16               |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Application No.                                                                                                                                                                                      | Applicant(s)                                                                                         |  |  |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 09/646,599                                                                                                                                                                                           | GODDARD ET AL.                                                                                       |  |  |  |  |  |
| Office Action Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Examiner                                                                                                                                                                                             | Art Unit                                                                                             |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | David Lukton                                                                                                                                                                                         | 1653                                                                                                 |  |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ears on the cover sheet with the c                                                                                                                                                                   | orrespondence address                                                                                |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status | 36(a). In no event, however, may a reply be tin<br>y within the statutory minimum of thirty (30) day<br>vill apply and will expire SIX (6) MONTHS from<br>, cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 27 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <u>//ay 2003</u> .                                                                                                                                                                                   |                                                                                                      |  |  |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) ☐ Th                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | is action is non-final.                                                                                                                                                                              |                                                                                                      |  |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                      |                                                                                                      |  |  |  |  |  |
| Disposition of Claims  (A) Claim(a) 1.57 in/ore pending in the application                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                      |                                                                                                      |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <ul> <li>4) ☐ Claim(s) 1-57 is/are pending in the application.</li> <li>4a) Of the above claim(s) 1-3,6 and 8-57 is/are withdrawn from consideration.</li> </ul>                                     |                                                                                                      |  |  |  |  |  |
| 5)⊠ Claim(s) 7 is/are allowed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <u> </u>                                                                                                                                                                                             |                                                                                                      |  |  |  |  |  |
| 6)⊠ Claim(s) <u>4 and 5</u> is/are rejected.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                      |                                                                                                      |  |  |  |  |  |
| 7) Claim(s) is/are objected to.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                      |                                                                                                      |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | r election requirement.                                                                                                                                                                              |                                                                                                      |  |  |  |  |  |
| Application Papers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                      |                                                                                                      |  |  |  |  |  |
| 9) The specification is objected to by the Examine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | r.                                                                                                                                                                                                   |                                                                                                      |  |  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                      |                                                                                                      |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                      |                                                                                                      |  |  |  |  |  |
| 11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                      |                                                                                                      |  |  |  |  |  |
| If approved, corrected drawings are required in reply to this Office action.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                      |                                                                                                      |  |  |  |  |  |
| 12)☐ The oath or declaration is objected to by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                      |                                                                                                      |  |  |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                      |                                                                                                      |  |  |  |  |  |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                      |                                                                                                      |  |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                      |                                                                                                      |  |  |  |  |  |
| 1. Certified copies of the priority documents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ·                                                                                                                                                                                                    |                                                                                                      |  |  |  |  |  |
| 2. Certified copies of the priority documents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                      |                                                                                                      |  |  |  |  |  |
| <ul><li>3. Copies of the certified copies of the prior application from the International But</li><li>* See the attached detailed Office action for a list</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                | reau (PCT Rule 17.2(a)).                                                                                                                                                                             |                                                                                                      |  |  |  |  |  |
| 14) Acknowledgment is made of a claim for domestic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | c priority under 35 U.S.C. § 119(6                                                                                                                                                                   | e) (to a provisional application).                                                                   |  |  |  |  |  |
| <ul> <li>a)  The translation of the foreign language pro</li> <li>15)  Acknowledgment is made of a claim for domesting</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | • •                                                                                                                                                                                                  |                                                                                                      |  |  |  |  |  |
| Attachment(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                      |                                                                                                      |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 5) Notice of Informal I                                                                                                                                                                              | (PTO-413) Paper No(s) Patent Application (PTO-152)                                                   |  |  |  |  |  |
| S. Patent and Trademark Office                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | · · · · · · · · · · · · · · · · · · ·                                                                                                                                                                |                                                                                                      |  |  |  |  |  |

Pursuant to the directives of paper No. 15 (filed 5/27/03), claims 5 and 7 have been amended. Claims 1-57 remain pending; claims 1-3, 6 and 8-57 remain withdrawn from consideration. Claims 4, 5 and 7 are examined in this Office action.

Claims 1-3 are drawn to a non-elected invention, and these claims will not be rejoined. It is suggested that applicants direct the cancellation of claims 1-3. As for claims 6 and 8-57, it is suggested that applicants do either of the following in response to this Office action:

(a) cancel claims 6 and 8-57, or (b) amend the claims to be dependent on claim 5. If the latter option is chosen, these claims will be rejoined and subsequently examined for compliance with §112, first paragraph (enablement).

Applicants' arguments filed 5/27/03 have been considered and found persuasive in part.

\*

Claims 4-5 are rejected under 35 U.S.C. §112 second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 4 is drawn to a composition. A composition, however, must have two components. Thus, claim 4 mandates the presence of a second component, yet is silent as to the criteria that this second component must meet. Accordingly, claim 4 is rendered indefinite.
- In claim 5, line 3, the following is recited: "OPO<sub>2</sub>HOPO<sub>3</sub>H<sub>2</sub>".

  Applicants have indicated that this is intended to refer to a single moiety. For clarity,

Serial No. 09/646,599 Art Unit 1653

either of the following is suggested:

 $-OP(O)(OH)-O-PO_3H_2$ 

 $-OP(O)(OH)-O-P(O)(OH)_2$ 

• In claim 5, substituent variable "X" is now undefined.

\*

The following is a quotation of the appropriate paragraphs of 35 U.S.C §102 that form the basis for the rejections under this section made in this action.

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2) and (4) of section 371(c) of this title before the invention thereof by the applicant for the patent.

Claim 5 is rejected under 35 U.S.C. §102(b) as being anticipated by Svyato, I. E. ("Inactivation of inorganic pyrophosphatase from yeasts by o-phosphoserine and its methyl ester", *Chem. Abstr.* **92** 17901s)

Svyato discloses the compound O-phosphoserine. This compound is encompassed by claim 5 when the substituent variables correspond as follows:

W = -OH

$$R = -CH_3$$

$$X = -O-$$

$$Z = -NH_2$$

$$Y = -O$$

Thus, the claim is anticipated.

\*

Claim 5 is rejected under 35 U.S.C. §102(b) as being anticipated by Avaeva, S. M. ("Hydrolysis of the methyl ester of O-phosphoserine", *Chem. Abstr.* 92 17901s)

Avaeva discloses the compound O-phosphoserine. This compound is encompassed by claim 5 when the substituent variables correspond as follows:

$$\dot{W} = -OH$$

$$R = -CH_3$$

$$X = -O-$$

$$Z = -NH_2$$

$$Y = -O-$$

Thus, the claim is anticipated.

\*

Claim 5 is rejected under 35 U.S.C. §102(b) as being anticipated by Neumann (European Journal of Biochemistry 8(2), 164-73, 1969)

Neumann discloses the compound O-phosphoserine (see table 1, page 166). This compound is encompassed by claim 5 when the substituent variables correspond as follows:

$$W = -OH$$

$$R = -CH_3$$

$$X = -O$$

$$Z = -NH_2$$

Serial No. 09/646,599 Art Unit 1653

Y = -O-

Thus, the claim is anticipated.

## Mochain is allowed

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lukton whose telephone number is 703-308-3213. The examiner can normally be reached Monday-Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low, can be reached at (703) 308-2923. The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

